Laser Tattoo Removal System

Laser HKS901

Operation Manual

CONTENT

1. Important Notice
2. Technical Specifications
3. Product Features
4. Working principle
5. Operations
6. Operation skills for laser tattoo removal system
7. Requirement before treatment
8. Before & after treatment by laser
9. Maintenance
10. Common Questions and Fixing
11. Special illustration

Important Notice:

1. Firstly check the circuitry connecting correctly or not before using the machine.
2. Before starting work, fill up the water-tank with distilled water from the Affusion Orifice.
3. Water must be distilled water or ion-wipe-off, not the mineral water or tap water.
4. Before using the machine, infuse the distilled water to the standard line on the water-tank. Prohibit to work without water. Otherwise, if shatter the laser head, the user bear it.
5. Avoid irradiation to eyes directly.
6. Forbid disassembling without manufacture permission.
7. Put the head light on fixture avoid broken after operation.
8. Change cooling water every month. (Long or short the time according to the water purity).
9. Start-up the machine after one minute later for the water circulation completely.
10. Ensure the machine well grounded.

Technical Specifications:

Type of laser: Solid-state Q-switch Nd:YAG laser
Wavelength: 1064nm, 532nm
Output Energy: 160mJ 350mJ 600mJ
Pulse duration: 8-10ns
Frequency: 1, 2, 3, 4, 5, 6Hz
Power supply: AC220V 50Hz
Power: 1500VA
Size: 400mm×230mm×200mm
Weight: 10kg

Application Range:

1. Remove the black &blue pigment on eyebrow, eye line and lip line. Scour off tattoo, freckle, lentigines, old aged marks, vascular expansion and type of blood vessel lesions etc.
2. No harm to the follicles and normal skin, leaving no scar, only to lustrate pigment.
3. To lustrate melanin not being eliminated by medicament and other means.
4. Be in no need of anesthesia and quick recovery. No negative influence.

Product Features:

1. Improve the efficiency and make the best solutions for no burning on the hand-piece at all.
2. Long lifetime for Xenon Lamp which is with the imported US technology.
3. More stability with the hand-piece structure inside improved.
4. Add the infrared Guide light to aim the target tissue correctly.
5. Portable design and easy operation can do the touring treatment; lower cost and wider usage can make quick return of investment.

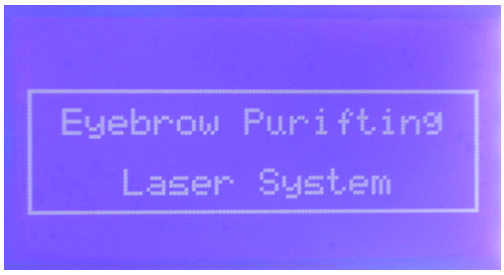
Working Principle ：

Laser emitted by the system has a strong penetration ability which allows it to reach the deep layer of dermis. The pigment particles absorb the light energy and explode sharply, burst into the tiny pieces, thus diminish the color density and get rid of it.

So the appliance can effectively do away with mutant pigmentations and vascular tissue based on undamaged ambient tissue. This is called ‘Selective heat absorption’ principle in medical field.

Operations:

Start the machine to display the welcome interface (Pic.1), press any key to enter the treatment interface.



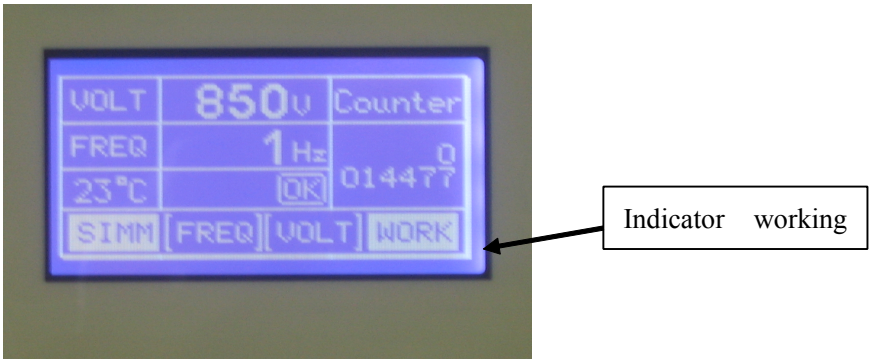
(Pic.1)

Screen Display：

(Pic.2)

There are four lines. The first line is for working Voltage, the adjustable range is 500V ~ 1000V. The second line is for working frequency， adjustable range is 1~6Hz. The third line is for water temperature and counter, the counter's range is 0~999999. The forth line is for working indication, there are four function buttons in this line.

Manual for user:

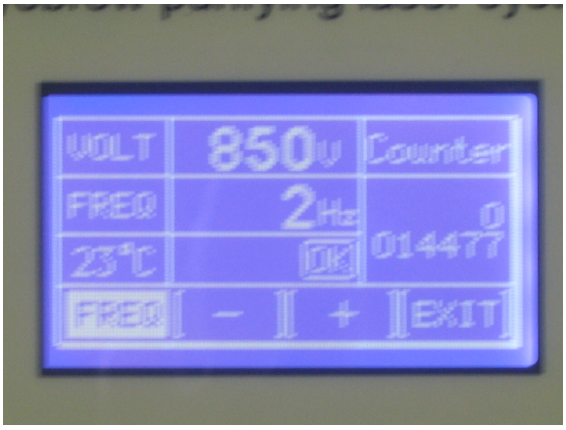


(Pic.3)

After entering the treatment interface, you can press ‘Freq’ or ‘Volt’ key to adjust the working frequency and the working voltage. Pressing the first key—simmer, the Xenon light will be switched on, after which, the button state becomes white. There promise to be on working if you press ‘Work’ key, the state shows ‘OK’, stepping on the footswitch there impulse the first pulse. While working, the impulse will be increased by one if your feet work once. Pulse calculated when impulse. If you want to switch off the machine, press ‘work’ button to stop working firstly, then press ‘simmer’ to exit pre-ignition state and then shut off the power switch. When you step on the foot-switch, none of the key on screen can work.

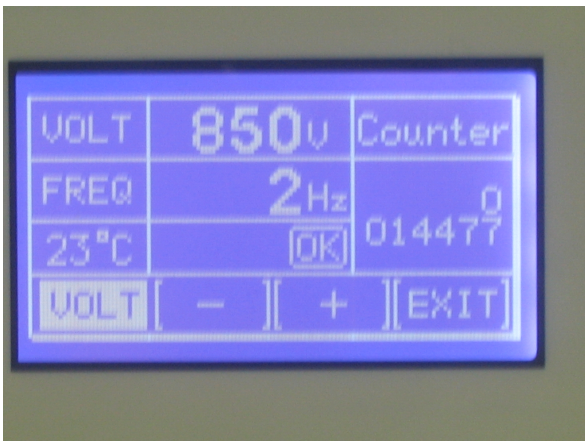
Frequency setting:

When you free the foot-switch, pressing “Freq” you can come to the pop-menu to adjust the frequency. Press “+ “key, the frequency will be increased. While pressing “– ’’key, it will be decreased accordingly. “Exit” key can help you out of this menu.



(Pic.4)

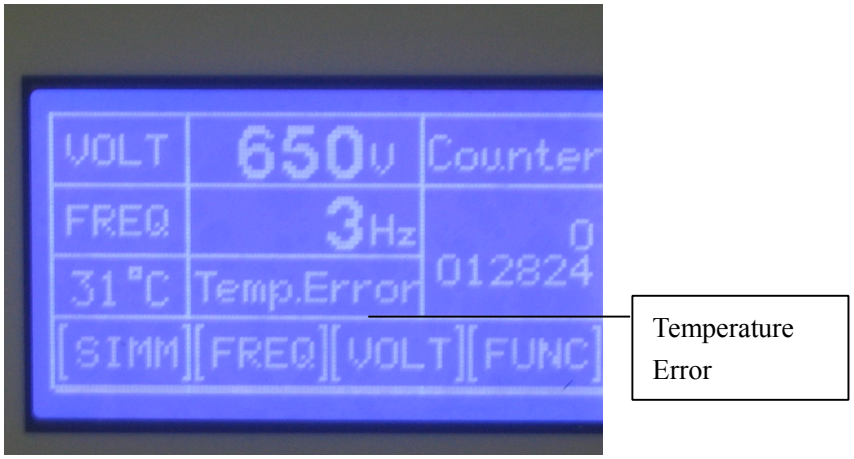
Working Voltage Setting:



（Pic.5）

Set free the foot-switch, entering into the voltage setting menu if you press ‘Volt’ key. Press ‘+’ key, the voltage will be increased; while pressing ‘–’ key, it will be decreased. Every time you can increase it by 10 V, the adjustable range is from 500V to 1000V. It will automatically increase or decrease if you keep pressing the key. Get out of the pop-menu if pressing “Exit”.

Water flow Protective Display:



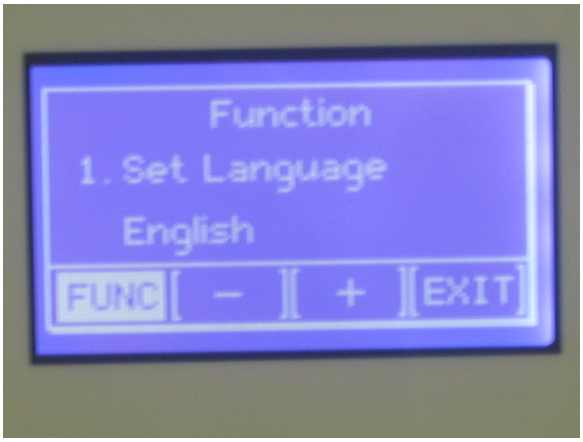
(Pic.6)

Temperature display can monitor the water flow inside the machine, when the temperature of circulated water exceed the temperature set in machine, the screen display “Eemp. Error”, and at the same time the buzzer is on working, system will stop working automatically. When the circulated water temperature is lower than the protective temperature, the system will be working normally.

Other Functions Setting:

Press “setting” button into system setting menu, users can set the special functions by pressing ‘+’ or ‘–’ key. Press “setting” button to have functions option.

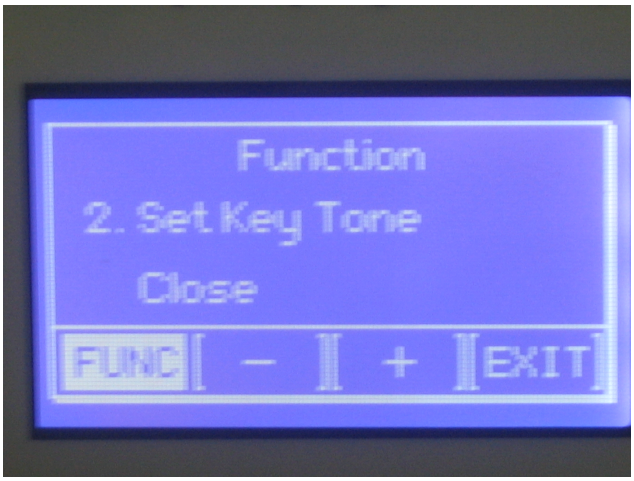
1. System Language



(Pic.7)

Press ‘Setting button’ as Pic.7 to make options of ‘Chinese’ version and ‘English’ Version, Press ‘Exit’ button to return last menu.

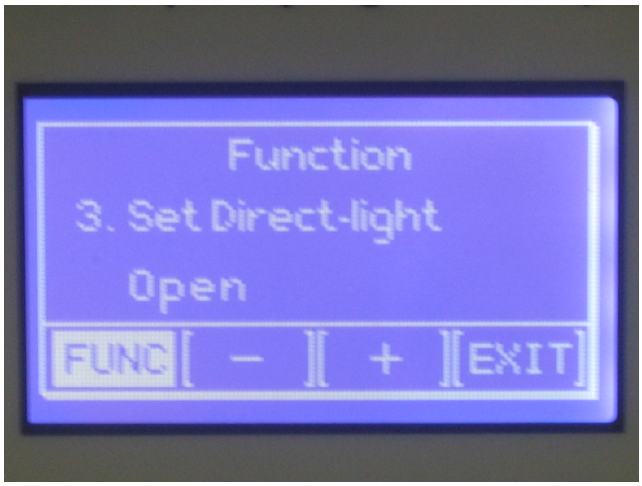
2. Set Key Tone



(Pic.8)

Key-press Voice setting, set “Open” or “close”.

3. Infrared Guide light setting



（Pic.9）

Infrared Guide light can be set as “Open” or “Close”.

Operation skills for laser tattoo removal system

Items	times	interval	notice
eyebrow	1~2	30-60day	Remove eyebrow hair and protect eyeballs
eyelid	1~3	45-60day	Remove eyebrow hair and protect eyeballs
lips outline	1~3	15-45day	use 532mn mirror
Body tattoo	1~4	30-60day	Exude blood is effective
flecks ,aged spot	1~5	15-30day	Exude blood is effective
birth mark	3~7	45-90day	Exude blood is effective

Requirement before treatment:

1) Beautician should make record for customers, fully understanding customers' skin condition and chose the right laser mirror, at the same time communicate with your customer freely to let she or he feel relax.

2) Clear treating part skin and wait until it is totally dry and sterilize every apparatus.

3) Energy reference

application	best frequency	distance
eyebrow	5Hz	1-2cm
cover layer	5Hz	2-4cm
eyelid	5Hz	2-3cm
lip outline	5Hz	2-4cm
body tattoo	5Hz 3Hz	3-4cm
naevi	5Hz 3Hz	3-4cm
birth mark	5Hz 3Hz	3-4cm

Notice：

A.1064nm（round mirror）for blue and black colors

B.532nm（square mirror）for red and brown color

Before & after treatment by laser

1. Preparation before treatment by:

⑴ No inflammation in the treatment part.

⑵ No treatment for pregnant woman.

⑶ Fomentation on the treatment part avoid skin dehydration.

⑷ No cosmetic left ,clean the treatment part.

⑸ Taking photo before treatment, compare the effect after operation.

2. Skin appearance after treatment:

⑴ Reddish swelling on treatment part on the moment, it will disappear shortly.

⑵ To some special customers need to be higher, when you make the Volt too high, there comes the scab, but it will drop off naturally after 7 days, not to scratch it, skin becomes normally about 2 days. Taking some Vitamins can lighten the pigment circumfluence. Usually there is a feeling of scorching or slight

bleeding, it is normal and no scar.

(3) When the scabs fade away, the treatment part shows pink, 2-3 weeks later it appears coffee color, and 1-2 months later recover.

3. Care after treatment:

(1) Can wash the skin with water or Non-stimulator after treatment.

(2) If there is slight bleeding when adjust the Volt higher, please wipe off and smear the Antiphlogistin (such as Illotycin) until the scar drops off. Not cosmetic or other medicines.

(3) If the treatment parts is flush and feeling it not comfortable, can do ice compress.

(4) Before the scab dropping off, the treatment part must be care not to touch water, not being scratching, avoiding certain food of hot, dark color of coffee, Coco Cola etc. Prohibit smoking and drinking .Let the scabs desquamate naturally not scale off in a force.

(5) Not taking plenty of sports avoiding of sweat infection.

(6) After the scab desquamating, No need to coat the Illotycin (Erythromycin) again, just smear the suntan lotion (SPF15 upwards) even in the room preventing UVA/UVB and keep along 3 to 6 months because of the treatment skin sensitivity to the sunlight. Using suntan lotion or umbrella preventing can improve the effect early.

(7) Period for laser treatment: According to the different treatment parts and pigment dark or not, the treatment may be several times. Normally one period of treatment is 1-2 times, every time at 20-30 days interval. If there is no special, every 2-4 weeks go to clinic check again, if there is anything abnormally, please cure it early.

(8) Pigment fadeaway is a slow process, for the pigmentation skin, normally it is 1-3 months. In order to get more favorable effect, repeated treatment should be 1-3 months interval.

Maintenance:

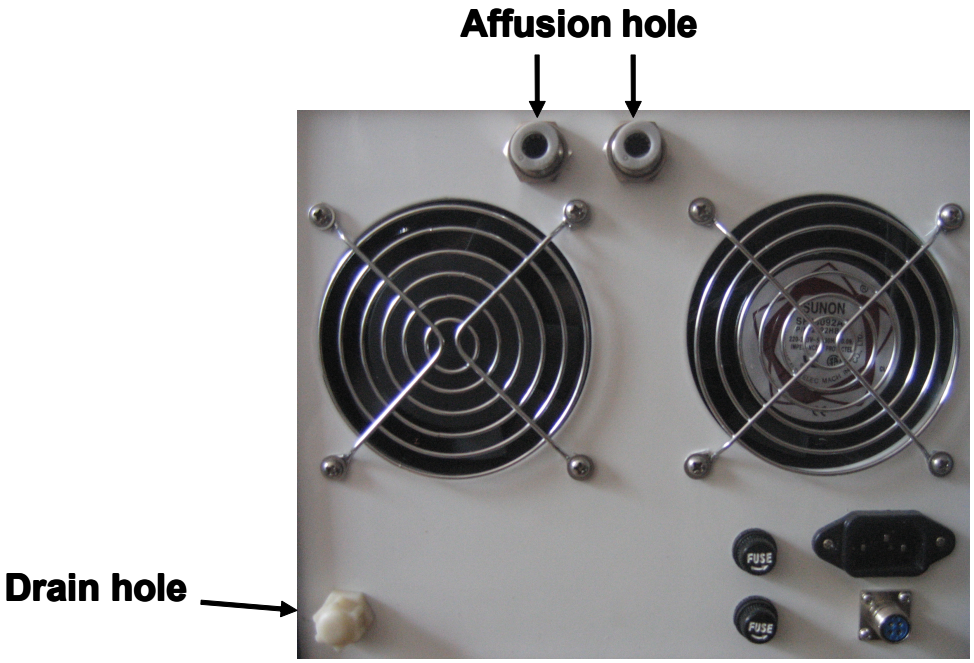
1. Notice to use purified water or de-ionized water, not the mineral water or tap water.
2. Be careful not to irradiate the machine avoiding the surface of machine injured.

Common Questions and Fixing:

1. No signal after power on. The reason is that the power plug doesn’t reach it, please directly connect the power plug.
2. No signal after power on because of the fuse blowing. Please replace the fuse with 5A/220V AC.
3. No signal on the screen because that the Crash-stop switch being pressed. Please lift the Emergency-stop switch up.
4. Touch-off light is off state pressing the button on the screen when the machine is on pre-ignition. One reason is that the Xenon Lamp is damaged need to replace a new one. Another reason is that the life time for Xenon is full, change a new one.
5. Water leaking out of machine, because of the impact during on shipment process. May in the tube joint. Please call the service people to deal with it.
6. If you feel the energy is not big enough or the curing treatment is not well enough, the reason maybe the temperature is too higher or no water in the machine and damaged the body machine. Please stop firstly, after half an hour starting the machine again.

Special illustration:

1. Illustration of rear panel



2. Press the plastic circle at the affusion hole when inserting or pulling out the affusion funnel.
3. Attention: there is a little rubber stuff in the drain hole. Don't lose it, or it may leak water!

Thanks for using our products! We will give you the best after sales service and technology solutions! Thanks again!